

NZYColour Protein Marker I,5-245 kDa

Catalogue number	Presentation
MB21501	1 x 500 µL (125 lanes)
MB21502	4 x 500 µL (500 lanes)

Description

NZYColour Protein Marker I is a ready to use mixture of 13 highly purified pre-stained proteins, covering a wide range of molecular weights from 5 to 245 kDa, specially designed for protein molecular weight estimation through SDS-PAGE electrophoresis. The NZYColour Protein Marker I is visible during the electrophoresis run, recommended for verification of Western transfer efficiency on membranes (PVDF, nylon, or nitrocellulose) and protein molecular weight determination. The molecular mass of the protein under investigation is determined by comparing its electrophoretic mobility with that of proteins contained in the marker.

Shipping & Storage Conditions

This product can be shipped at a range of temperatures from dry ice to blue ice. After delivery, product should be stored at -85°C to -15°C. This marker is stable enough to allow to be stored at 4°C for short-term storage for up to 3 months. However, to ensure its sustained stability, it is strongly advisable to prepare and store small-volume aliquots of the marker at -85 to -15 °C. NZYColour Protein Marker I will remain stable till the expiry date if stored as specified.

Components

COMPONENT	MB21501 (125 lanes)		MB21502 (500 lanes)	
	TUBES	VOLUME	TUBES	VOLUME
NZYColour Protein Marker I	1	500 µL	4	500 µL

Specifications

Size range: 5 kDa to 245 kDa

Number of bands: 13

Size of bands: 5 kDa, 10 kDa, 15 kDa, 20 kDa, 25 kDa (green), 35 kDa, 45 kDa, 60 kDa, 75 kDa (red), 100 kDa, 140 kDa, 180 kDa, 245 kDa

Standard Protocol

1. Load directly 3-5 µL per lane. Before use, mix well. Do not heat, dilute or add reducing agents before loading.
2. Perform electrophoresis according to the instructions supplied with the gel apparatus being used. Stain the gel using appropriate staining solution, such as the BlueSafe (NZYtech, Cat. No. MB15201).

Technical Notes

Acrylamide

A range of 10-15% acrylamide SDS-PAGE gel concentration is recommended. This range allows for optimal resolution of protein bands within this size range during electrophoresis.

Molecular Weight determination

Measure the migration distance of the protein markers and of the protein(s) of interest. Measure the migration distance of the dye marker. Calculate the corresponding R_f values by dividing migration distance of the protein by migration distance of the dye marker. Construct a calibration curve by graphing R_f vs. log molecular weight for the proteins in the NZYColour Protein Marker I. Determine the molecular weight of the protein(s) of interest from the calibration curve.

Data

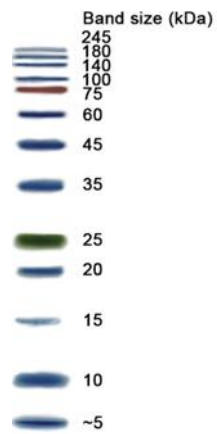


Figure 1. NZYColour Protein Marker I stained with BlueSafe (NZYtech, Cat. No. MB15201). The gel was loaded with 5 μ L of NZYColour Protein Marker I standard per lane on a 10% Tris-glycine SDS-PAGE.

Quality control assays

Electrophoretic Pattern (Marker)

5 μ L of NZYColour Protein Marker I is electrophoresed in a 10% (v/v) Tris-glycine SDS-PAGE to check the intensity and the pattern of bands. It is expected to observe 13 regularly spaced bands as presented in Figure 1 above.

For life science research only. Not for use in diagnostic procedures.